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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): NOVE100042000

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on _____

Signature _____

Typed or printed name _____

Application Number	Filed
10/823,355	April 12, 2004

First Named Inventor: Robert Martinson

Art Unit	Examiner
1753	Band, M.A.

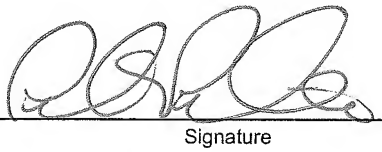
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [X] attorney or agent of record. Registration number 31,867.
- [ ] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____



Signature

Peter W. Peterson

Typed or printed name

203 787-0595

Telephone number

October 11, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

[X] *Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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DOCKET: NOVE100042000 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR:	Robert Martinson	EXAMINER:	Band, M.A.
SERIAL NO.:	10/823,355	ART UNIT:	1753
FILING DATE:	April 12, 2004	DATE:	October 11, 2007
FOR:	Moving Interleaved Sputter Chamber Shields		

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This pre-appeal brief request for review is based on the Examiner's omissions of one or more essential elements needed for a prima facie rejection.

The basis for the final rejection

Claims 1-11 and 13-20 stand finally rejected under 35 USC § 102 as being anticipated by Chung et al. U.S. Patent No. 6,171,453 or, in the alternative, under 35 USC § 103 as being obvious from Chung et al. Applicants respectfully traverse these rejections.

Applicant's claimed invention

Applicants' invention is a shielding system and method of shielding a physical vapor deposition chamber, which includes the pedestal shield and sidewall shield as

recited in the claims, which cooperate, when the pedestal is in the raised position, to prevent line-of-sight deposition transmission from the sputter target to the side and lower walls of the deposition chamber. Importantly, in the claimed system and method, the pedestal is movable between a lowered loading and unloading position and a raised deposition processing position and surrounded by chamber interior lower, side and upper walls. As stated in independent system claims 1 and 14, and in the second step of method claim 20, when the pedestal is in the lowered position (i.e., for loading), the claimed sidewall shield lower end is above the pedestal a distance sufficient to permit a wafer to be horizontally loaded onto the pedestal. This is an essential limitation needed for a prima facie rejection. An element which shows this limitation is completely absent from the cited Chung patent.

The omission in the cited Chung patent of one or more essential elements needed for a prima facie rejection

The Examiner has taken the position that the Chung et al. patent discloses a shielding system for a physical deposition chamber in which clamp ring 44 cooperates with lower chamber shield 48 (Figs. 3A and 3B), clamp ring 64 cooperates with lower chamber shield 68 (Figs. 5A and 5B) and pedestal shielding ring 84 cooperates with lower chamber shield 48 (Figs. 6A and 6B). See Final Office Action, p.2. In Chung, the cooperation between these parts only takes place when the pedestal 42 or 82 is in the lowered or "release position" as shown in Figs. 3A, 5A and 6A.

When Chung's pedestal is in the lowered position, the Chung reference fails to meet the structural and functional limitations of applicants' claimed invention with respect to the position of the sidewall shield lower end that is above the pedestal. Applicants' claims require that the position of the sidewall shield lower end be above

the pedestal, when the pedestal is in the lowered position, a distance sufficient to permit a wafer to be horizontally loaded onto the pedestal. Chung's Figs. 3A, 5A and 6A clearly show the lower ends of chamber shield 48 (Figs. 3A and 6A) and chamber shield 68 (Fig. 5A) to be below the pedestal when it is in the lowered position. Thus, Chung lacks the essential limitation of claims 1, 14 and 20 that the lower ends of chamber shield 48 or 68 be above the pedestal when it is in the lowered position.

The Examiner has also taken the position that it would be inherent or obvious in Chung's design to remove part 48 (the lower chamber shield in Figs. 3A and 3B) via the connector pin to leave sufficient distance to load the wafer horizontally. See Final Office Action, p.3. This is irrelevant to meeting applicants' claimed limitation, and is itself an admission that Chung's shield 48 does not have a lower end that is above the pedestal, when the pedestal is in the lowered position, a distance sufficient to permit a wafer to be horizontally loaded onto the pedestal. If Chung's chamber shield 48 had a lower end that was above the pedestal when the pedestal is in the lowered position, it would not have to be removed for horizontal loading of the wafer.[1] Since this limitation is in all the independent claims, applicants' claimed invention is not anticipated or rendered obvious by Chung.

Although not raised by the Examiner, applicants also wish to point out that Chung's upper chamber shield 46 also does not meet the limitations of the "sidewall shield" of claims 1, 14 and 20. As stated in those claims, the pedestal shield and sidewall shield cooperate, when the pedestal is in the raised position, to prevent line-of-sight deposition transmission from the sputter target to the side and lower walls of

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[1] On the other hand, if the chamber shield 48 is removed, it no longer in the deposition chamber and therefore has no end above the pedestal.

the deposition chamber. When in the raised position (Figs. 3B, 5B and 6B), there is clearly line of sight transmission between the pedestal and upper chamber shield 46 to the side and lower walls of the deposition chamber.

For the reasons given above, review and reconsideration of the final rejection, and issuance of a notice of allowance, are respectfully solicited.

Respectfully submitted,

Peter W. Peterson
Reg. No. 31,867

DeLIO & PETERSON, LLC
121 Whitney Avenue
New Haven, CT 06510-1241
(203) 787-0595

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